

# SEQUENCE LISTING

<110> Birger Sorensen

<120> HIV Peptides, antigens, vaccine compositions, immunoassay kit and a method of detecting antibodies induced by HIV.

<130> 2833.4001LO

<140> TBA

<141> 2003-09-11

<150> US 09/674,674

<151> 2001-07-25

<160> 49

<170> PatentIn Ver. 3.1

<210> 1

<211> 20

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

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<222> 18

<223> Xaa in position 18 is Gly, Glu or Arg

<220>

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<222> 20

<223> Xaa in position 20 is Gly or Arg

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Xaa Xaa Xaa Xaa Xaa Xaa Ala Xaa Xaa Gln Thr Pro Trp Xaa Xaa Xaa  
1 5 10 15

Xaa Xaa Val Xaa  
20

<210> 2

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 <223> disulfide, optional, can form a homodimer with another SEQ ID NO 2 or a heterodimer with SEQ ID NO 5

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 Lys Ala Leu Gly Pro Gly Ala Thr Leu Gln Thr Pro Trp Thr Ala Cys  
 1 5 10 15

Gln Gly Val Gly  
 20

<210> 3  
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<400> 3  
 Arg Ala Leu Gly Pro Ala Ala Thr Leu Gln Thr Pro Trp Thr Ala Ser  
 1 5 10 15

Leu Gly Val Gly  
 20

<210> 4  
 <211> 25  
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<223> synthetic peptide

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 <223> Xaa in position 2 is Trp, Gly, Lys or Arg

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 <223> Xaa in position 18 is Ser, Cys or Gln  
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 <223> Xaa in position 21 is Ser, Gly or Thr  
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<223> disulfide, optional

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<400> 4  
Xaa Xaa Xaa Xaa Xaa Gly Leu Asn Pro Leu Val Xaa Xaa Xaa Xaa Xaa  
1 5 10 15  
Tyr Xaa Pro Xaa Xaa Ile Leu Xaa Xaa  
20 25

<210> 5  
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<223> disulfide, optional, can form homodimer with another SEQ ID NO 5 or a heterodimer with SEQ ID NO 2

<400> 5  
Trp Ile Ile Pro Gly Leu Asn Pro Leu Val Gly Gly Gly Lys Leu Tyr  
1 5 10 15  
Ser Pro Thr Ser Ile Leu Cys Gly  
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<210> 6  
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<400> 6  
Arg Trp Leu Leu Leu Gly Leu Asn Pro Leu Val Gly Gly Gly Arg Leu  
1 5 10 15  
Tyr Ser Pro Thr Ser Ile Leu Gly

20

<210> 7  
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<400> 7  
Lys Ile Leu Leu Gly Leu Asn Pro Leu Val Gly Gly Gly Arg Leu Tyr  
1 5 10 15

Ser Pro Thr Ser Ile Leu Gly  
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<210> 8  
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Arg Leu Leu Leu Gly Leu Asn Pro Leu Val Gly Gly Gly Arg Leu Tyr  
1 5 10 15

Ser Pro Thr Thr Ile Leu Gly  
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<210> 9  
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<222> 2  
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<220>

<221> VARIANT  
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<221> VARIANT

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 <223> xaa in position 10 is Ile, Met, Val or Leu  
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 <223> xaa in position 11 is Tyr, Leu or missing  
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 1 5 10 15  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 20 25  
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<223> disulfide, optional

<400> 10

Arg Asn Ile Pro Ile Pro Val Gly Asp Ile Tyr Gly Gly Gly Asp Ile  
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Tyr Lys Arg Trp Gln Ala Leu Cys Leu  
20 25

<210> 11

<211> 26

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<400> 11

Arg Ala Ile Pro Ile Pro Ala Gly Thr Leu Leu Ser Gly Gly Gly Arg  
1 5 10 15

Ala Ile Tyr Lys Arg Trp Ala Ile Leu Gly  
20 25

<210> 12

<211> 23

<212> PRT

<213> artificial sequence

<220>

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<400> 12

Ala Leu Pro Ile Pro Ala Gly Phe Ile Tyr Gly Gly Gly Arg Ile Tyr  
1 5 10 15

Lys Arg Trp Gln Ala Leu Gly  
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<213> artificial sequence

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<400> 13

Lys Ile Pro Ile Pro Val Gly Phe Ile Gly Gly Gly Trp Ile Tyr Lys  
1 5 10 15

Arg Trp Ala Ile Leu Gly  
20

<210> 14  
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<400> 14  
Lys Ile Pro Ile Pro Val Gly Thr Leu Leu Ser Gly Gly Gly Arg Ile  
1 5 10 15

Tyr Lys Arg Trp Ala Ile Leu Gly  
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 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 20 25 30  
  
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 <223> disulfide, optional  
  
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 Asp Leu Asn Thr Xaa Leu Asn Cys Ile  
 20 25  
  
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<222> 26  
<223> disulfide, optional

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Lys Phe Ile Ile Pro Xaa Phe Ser Ala Leu Ser Gly Gly Gly Ala Ile  
1 5 10 15

Ser Tyr Asp Leu Asn Thr Phe Leu Asn Cys Ile Gly  
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1 5 10 15

Leu Leu Tyr Gly Ala Thr Pro Tyr Ala Ile Gly  
20 25

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<400> 19  
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1 5 10 15

Gly Ala Thr Pro Tyr Ala Ile Gly  
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1 5 10 15  
Tyr Gly Ala Thr Pro Tyr Ala Ile Gly  
20 25

<210> 21

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<223> disulfide, optional

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Asn Ile Pro Ile Pro Val Gly Asp Ile Tyr Gly Gly Gly Asp Ile Tyr  
1 5 10 15  
Lys Arg Tyr Gln Ala Leu Cys Leu  
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<223> Xaa is Nle

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<223> disulfide, optional

<400> 25

Trp Ile Ile Pro Xaa Phe Ser Ala Leu Gly Gly Ala Ile Ser Tyr Asp  
1 5 10 15

Leu Asn Thr Xaa Leu Asn Cys Ile  
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<210> 26

<211> 20

<212> PRT

<213> Homo sapiens

<400> 26

Lys Ala Leu Gly Pro Gly Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
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<210> 27

<211> 20

<212> PRT

<213> Homo sapiens

<400> 27

Arg Arg Met Arg Thr Lys Ala Ser Ile Lys Asp Met Leu Ser Ser Ser  
1 5 10 15

Gln Arg Val Arg  
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<210> 28

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<212> PRT

<213> Homo sapiens

<400> 28

Lys Gly Leu Gly Val Arg Ala Thr Leu Glu Glu Met Met Val Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 29

<211> 20

<212> PRT

<213> Homo sapiens

<400> 29

Lys Ser Leu Gly Ala Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15



Gln Gly Val Gly  
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<210> 30  
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<212> PRT  
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<400> 30  
Lys Ala Leu Gly Ser Glu Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 31  
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<212> PRT  
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<400> 31  
Lys Ala Leu Gly Gln Gln Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 32  
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<223> disulfide

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Ala Asn Pro Asp Cys Lys Gln Ile Leu Lys Ser leu Gly Pro Gly Ala  
1 5 10 15

Thr Leu Gln Gln Xaa Xaa Thr Ala Cys Gln Gly Val Gly  
 20 25

<210> 33  
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 Leu Ile Trp Gly Ala Thr Cys Gln Glu His Xaa Thr Ala Cys Gln Gly  
 1 5 10 15

Val Gly

<210> 34  
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<400> 34  
 Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro  
 1 5 10 15

Thr Ser Ile Leu Asp  
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<210> 35  
 <211> 21  
 <212> PRT  
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<400> 35  
 Lys Gly Val Val Met Gly Leu Asn Lys Met Val Lys Met Tyr Cys Pro  
 1 5 10 15

Val Gly Ile Leu Glu  
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<210> 36  
 <211> 21  
 <212> PRT

<213> Homo sapiens

<400> 36

Lys Trp Met Ile Val Gly Leu Asn Lys Val Val Arg Met Tyr Gln Pro  
1 5 10 15

Ile Ser Ile Leu Gly  
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<210> 37

<211> 21

<212> PRT

<213> Homo sapiens

<400> 37

Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro  
1 5 10 15

Ser Ser Ile Leu Asp  
20

<210> 38

<211> 21

<212> PRT

<213> Homo sapiens

<400> 38

Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro  
1 5 10 15

Ala Ser Ile Leu Asp  
20

<210> 39

<211> 19

<212> PRT

<213> Homo sapiens

<400> 39

Asn Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 40

<211> 19

<212> PRT

<213> Homo sapiens

<400> 40

Ser Asn Gln Ala Val Pro Val Lys Asp Met Leu Arg Lys Gly Met Val  
1 5 10 15

Met Gly Leu

<210> 41

<211> 19

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<213> Homo sapiens

<400> 41

Gly Asn Gly Ser Asn Pro Val Gly Lys Val Tyr Lys Asp Trp Val Ile  
1 5 10 15

Val Gly Leu

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<212> PRT  
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<400> 42  
His Asn Pro Gly Thr Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 43  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 43  
Ala Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 44  
<211> 19  
<212> PRT  
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Pro Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
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Leu Gly Leu

<210> 45  
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Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser Glu Gly Ala Thr Pro  
1 5 10 15

Gln Asp Leu Asn Thr  
20

<210> 46  
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<400> 46  
Pro Arg Ile Thr Thr Thr Leu Thr Glu Leu Ala Asp Gly Ala Ile Ser  
1 5 10 15

Tyr Asn Ile Tyr Met  
20

<210> 47  
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<212> PRT  
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<400> 47  
 Pro Glu Leu Asn Pro Met Phe Ala Leu Leu Ser Glu Gly Ala Val Pro  
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His Asp Val Asn Ile  
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<210> 48  
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<400> 48  
 Pro Glu Val Ile Pro Met Phe Met Ala Leu Ser Glu Gly Ala Leu Pro  
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Gln Asp Leu Asn Ala  
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<210> 49  
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<400> 49  
 Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser Glu Gly Ala Thr Pro  
 1 5 10 15

Gln Asp Leu Asn Val  
 20